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| STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005 | | | EXAMINER DICKERSON, CHAD S | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/688,911

Applicant(s)

YOON, TAE-JUNG

Examiner

CHAD DICKERSON

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 37-41 have been considered but are moot in view of the new ground(s) of rejection. The amendment to the claims has necessitated a new ground(s) of rejection. However, the reference of Tsukamoto '033 still applies to the amended claim language. The applicant added an amendment to the claims of automatically executing a main program in an apparatus when powering the device and this feature is disclosed in the description of the related art in Applicant's specification. In addition, the Applicant argued in the response accompanied with the RCE that the applied reference of Tsukamoto does not disclose having a program that provides additional functions to the system, but merely a substitution of a feature already present. The Examiner respectfully disagrees with this assertion and would like to briefly address this contention below.

As disclosed in Tsukamoto, the invention involves containing an additional function card (1602) and a program IC card (1603) that is able to store a program and data for using the function of the additional function card¹. It is understood that the purpose of the additional function card is to introduce an additional function to the system based on the cited passages. Since this program works with the main program controlling the copier device, it is clear that the additional function works with the main program to perform the additional function on the copier that is considered as a new feature to the system. Therefore, the Examiner believes that the reference of

¹ See Tsukamoto '033 at paragraphs [0158]-[0165].

Tsukamoto combined with the description of the related art in Applicant's specification discloses the features of the independent claims.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 36, 38, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto '033 (US Pub No 2002/0048033) in view of the Description of the Related Art.

Re claim 36: Tsukamoto '033 discloses a method of controlling an image processing apparatus, the method comprising:

executing a main program in the image processing apparatus (i.e. in the system of Tsukamoto, since the CPU (101) controls the apparatus with a program stored in ROM (102), this is considered as the main program being executed in the copier device; see paragraph [0029]),

removably receiving a portable storage unit in an interface of the image processing apparatus (i.e. there are a plurality of card slots (121 and 122), considered as interfaces in Tsukamoto '033 that are able to receive memory cards in the system. The memory cards in the system can be considered as portable storage units since they

can be taken in and out of the printing apparatus's card slots in figure 26; see figs. 3, 17, 20, 26-28, 31-42; paragraphs [0172]);

determining whether the portable storage unit includes an execution file relating to the main program loaded in a memory of the image processing apparatus (i.e. in the system, a card storing data, which can be image data or a program, can be used. The program relating to the CPU (101) that reads the card can distribute whether the card contains a program to execute a function or data that is simply exchanged between the memory card and RAM (103). The program IC card and interface card can be considered as a portable storage units since they both store either a function to be realized by a printer or the software to perform the function. Within the system, the software on the cards are corresponding to, or related with, the main program on the copier since these introduced programs work with the main program to perform some function; see figs. 26-28, 31-42; paragraphs [0030] and [0115]-[0134]); and

executing the execution file stored in the portable storage unit as a plug-in program of the main program loaded in a memory of the image processing apparatus (i.e. different cards that store different functions can be used to expand the apparatus in the system. A program IC card can store a program to be used in conjunction with a card that introduces the actual feature to realize the other cards functionality. Also, a card can be placed in the card slot and the program on the card can be read to perform the function on the card. The interface card can be installed in an apparatus to realize an additional function on the printer introduced by the interface card. The program stored in the ROM is utilized to execute the programs on the IC cards inserted in the card slots.

Since the program in ROM is used to operate the inserted card and associated function, then this feature is considered as having a plug-in program introduced to the main application program stored in the ROM being executed; see figs. 26-28, 31-42; paragraphs [0029], [0030], [0115]-[0134] and [0166]-[0173]),

wherein the plug-in program does not have an independent interface and can only be used by being connected with the main program (i.e. the program on the IC card has to be connected to the main program running the overall printing device in order for the function associated with the IC card to operate; see paragraphs [0079], [0126]-[0129] and [0161]-[0173]) and

provides additional function to the main program that was not previously supported by the main program (i.e. in the Tsukamoto reference, an additional function card (1602) is used to introduce a function that was previously impossible for the CPU (101) to do without the function card. The additional function card introduces a new function to the system that was not previously performed before the card was brought into interaction with the copier's application program; see paragraphs [0079], [0126]-[0129] and [0161]-[0173]).

However, Tsukamoto '033 fails to specifically teach wherein the main program is automatically executed in response to powering on of the image processing apparatus.

However, this is well known in the art as evidenced by the description of the related art. The description of the related art discloses wherein the main program is automatically executed in response to powering on of the image processing apparatus (i.e. as disclosed in the description of the related art, upon receipt of the power supply,

the control unit controls the entire operation of the printer, which includes controlling the multiple programs associated with the multiple features of the printer; see paragraph [0005] of Applicant's spec).

Therefore, in view of the description of the related art, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of wherein the main program is automatically executed in response to powering on of the image processing apparatus, incorporated in the device of Tsukamoto '033, in order to control the entire operation of the printer (as stated in the description of the related art paragraph [0004]).

Re Claim 38: The teachings of Tsukamoto '033 and the Description of the related Art are disclosed above.

Tsukamoto '033 discloses the method of claim 37, wherein the interface comprises a card slot (i.e. an interface portion (120) has two card slots (121 and 122) to enable two communication cards to be connected; see figs. 1, 26-28, 31-40; paragraphs [0044]-[0046], [0143]-[0165]).

Re Claim 39: Tsukamoto '033 discloses an image processing apparatus comprising:

a printing unit to execute printing functions (i.e. the communication apparatus comprises a recording portion that is able to perform printing functions; see fig. 1, paragraphs [0036]-[0038]);

a processor to control printing functions executed by the printing unit (i.e. in the system of Tsukamoto, since the CPU (101) controls the apparatus with a program stored in ROM (102), this is considered as the main program being executed in the copier device; see paragraph [0029]),

a memory (i.e. the RAM or ROM is considered as the memory; see paragraphs [0029] and [0030]);

an operation panel unit (i.e. the operation portion (104) is considered as the operation panel; see paragraph [0031]); and

an interface to removably receive a portable storage unit (i.e. card slots (121 and 122) are considered as interfaces that can receive portable storage units or IC cards; see paragraph [0116]),

wherein if it is determined that a portable storage unit, connected to the interface, includes an execution file corresponding to one of the programs executed by the processor (i.e. in the system, a card storing data, which can be image data or a program, can be used. The program relating to the CPU (101) that reads the card can distribute whether the card contains a program to execute a function or data that is simply exchanged between the memory card and RAM (103). The program IC card and interface card can be considered as a portable storage units since they both store either a function to be realized by a printer or the software to perform the function. Within the system, the software on the cards are associated to, or related with, the main program on the copier since these introduced programs work with the main program to perform some function; see figs. 26-28, 31-42; paragraphs [0030] and [0115]-[0134]), the

execution file stored in the portable storage unit is executed as a plug-in program of the corresponding one of the executed programs (i.e. different cards that store different functions can be used to expand the apparatus in the system. A program IC card can store a program to be used in conjunction with a card that introduces the actual feature to realize the other cards functionality. Also, a card can be placed in the card slot and the program on the card can be read to perform the function on the card. The interface card can be installed in an apparatus to realize an additional function on the printer introduced by the interface card. The program stored in the ROM is utilized to execute the programs on the IC cards inserted in the card slots. Since the program in ROM is used to operate the inserted card and associated function, then this feature is considered as having a plug-in program introduced to the main application program stored in the ROM being executed; see figs. 26-28, 31-42; paragraphs [0029], [0030], [0115]-[0134] and [0166]-[0173]),

wherein the plug-in program does not have an independent interface and can only be used by being connected with the corresponding one of the executed programs (i.e. the program on the IC card has to be connected to the main program running the overall printing device in order for the function associated with the IC card to operate; see paragraphs [0079], [0126]-[0129] and [0161]-[0173]) and provides additional function to the one of the executed programs that was not previously supported by the one of the executed programs (i.e. in the Tsukamoto reference, an additional function card (1602) is used to introduce a function that was previously impossible for the CPU (101) to do without the function card. The additional function card introduces a new

function to the system that was not previously performed before the card was brought into interaction with the copier's application program; see paragraphs [0079], [0126]-[0129] and [0161]-[0173]).

However, Tsukamoto '033 fails to specifically teach wherein the processor executes a plurality of programs in response to powering on of the image processing apparatus.

However, this is well known in the art as evidenced by the description of the related art. The description of the related art discloses wherein the processor executes a plurality of programs in response to powering on of the image processing apparatus (i.e. as disclosed in the description of the related art, upon receipt of the power supply, the control unit controls the entire operation of the printer, which includes controlling the multiple programs associated with the multiple features of the printer; see paragraph [0005] of Applicant's spec).

Therefore, in view of the description of the related art, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of wherein the processor executes a plurality of programs in response to powering on of the image processing apparatus, incorporated in the device of Tsukamoto '033, in order to control the entire operation of the printer (as stated in the description of the related art paragraph [0004]).

Re Claim 41: The teachings of Tsukamoto '033 and the Description of the related Art are disclosed above.

Tsukamoto '033 discloses the image processing apparatus of claim 40, wherein the interface comprises a card slot (i.e. an interface portion (120) has two card slots (121 and 122) to enable two communication cards to be connected; see figs. 1, 26-28, 31-40; paragraphs [0044]-[0046], [0143]-[0165]).

4. Claims 37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto '033, as modified by the description of the related art, as applied to claims 36 and 39 above, and further in view of Kanno '609 (USP 6252609).

Re Claim 37: The teachings of Tsukamoto '033 and the Description of the related Art are disclosed above.

However, Tsukamoto '033 fails to specifically teach The method of claim 36, further comprising: displaying, via an operation panel unit of the image processing apparatus, a menu to enable a user to select whether to execute the plug-in program stored in the portable storage unit; receiving, via the operation panel unit of the image processing apparatus, a request to execute the plug-in program stored in the portable storage unit; and executing the plug-in program stored in the portable storage unit in response to the receiving of the request via the operation panel unit of the image processing apparatus.

However, this is well known in the art as evidenced by Kanno '609. Kanno '609 discloses displaying, via an operation panel unit of the image processing apparatus, a menu to enable a user to select whether to execute the plug-in program stored in the

portable storage unit (i.e. the device of Kanno is similar to Tsukamoto since both inventions involve executing programs introduced to a copier through an IC card (same field of endeavor). However, in Kanno '609, the system discloses showing a user a list, or menu, of functions that have been stored on the IC card and that can be selected and used in the copier device; see col. 10, ll. 14-36);

receiving, via the operation panel unit of the image processing apparatus, a request to execute the plug-in program stored in the portable storage unit (i.e. the user is able to select the functions in the list by operating the control panel (114) of the copier device and this selection is accepted as a request to execute a program; see fig. 6, col. 10, ll. 14-36); and

executing the plug-in program stored in the portable storage unit in response to the receiving of the request via the operation panel unit of the image processing apparatus (i.e. the copier receives this selection through the control panel and operates the selected feature in the manner related to the copier device; see fig. 6, col. 10, ll. 14-36).

Therefore, in view of Kanno '609, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of displaying, via an operation panel unit of the image processing apparatus, a menu to enable a user to select whether to execute the plug-in program stored in the portable storage unit; receiving, via the operation panel unit of the image processing apparatus, a request to execute the plug-in program stored in the portable storage unit; and executing the plug-in program stored in the portable storage unit in response to the receiving of the request

via the operation panel unit of the image processing apparatus, incorporated in the device of Tsukamoto '033, as modified by the description of the related art in Applicant's spec, in order to display a list of functions stored on an IC card (as stated in Kanno '609 col. 10, ll. 17-24).

Re Claim 40: The teachings of Tsukamoto '033 and the Description of the related Art are disclosed above.

However, Tsukamoto '033 fails to specifically teach The image processing apparatus of claim 39, wherein the operation panel unit is configured to display a menu to enable a user to select whether to execute the plug-in program stored in the portable storage unit, and to receive a request to execute the plug-in program stored in the portable storage unit, wherein the plug-in program stored in the portable storage unit is executed in response to the receiving of the request via the operation panel unit.

However, this is well known in the art as evidenced by Kanno '609. Kanno '609 discloses wherein the operation panel unit is configured to display a menu to enable a user to select whether to execute the plug-in program stored in the portable storage unit (i.e. the device of Kanno is similar to Tsukamoto since both inventions involve executing programs introduced to a copier through an IC card (same field of endeavor). However, in Kanno '609, the system discloses showing a user a list, or menu, of functions that have been stored on the IC card and that can be selected and used in the copier device; see col. 10, ll. 14-36), and

to receive a request to execute the plug-in program stored in the portable storage unit (i.e. the user is able to select the functions in the list by operating the control panel (114) of the copier device and this selection is accepted as a request to execute a program; see fig. 6, col. 10, ll. 14-36),

wherein the plug-in program stored in the portable storage unit is executed in response to the receiving of the request via the operation panel unit (i.e. the copier receives this selection through the control panel and operates the selected feature in the manner related to the copier device; see fig. 6, col. 10, ll. 14-36).

Therefore, in view of Kanno '609, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of wherein the operation panel unit is configured to display a menu to enable a user to select whether to execute the plug-in program stored in the portable storage unit, and to receive a request to execute the plug-in program stored in the portable storage unit, wherein the plug-in program stored in the portable storage unit is executed in response to the receiving of the request via the operation panel unit, incorporated in the device of Tsukamoto '033, as modified by the description of the related art in Applicant's spec, in order to display a list of functions stored on an IC card (as stated in Kanno '609 col. 10, ll. 17-24).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Suzuki '288 (USP 5027288) discloses systems in which a recording apparatus can have various recording functions altered and add various other functions using a portable storage means such as an IC card.
7. Murata '067 (USP 6330067) discloses a digital copying machine that has a card slot that is able to determine if a card is present in the card slot and the type of information present on the card to be download onto the copying machine and processed in the digital device.
8. Fukui (USP 5678135) discloses a system that updates an image forming apparatus with new programs that allow newly added features to function with the printing device. The programs may be provided from a network connected source or a storage medium inside the portable extension part connected to the apparatus to expand the printing device's features.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on 9:30-6:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. D./
/Chad Dickerson/
Examiner, Art Unit 2625

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625